Fr m th INTERNATIONAL SEA	RCHING AUTHORITY		PCT
To: SMITHKLINE BEECHAM Attn. PRIVETT, Kathryn Two New Horizons Court Brentford	n Louise		NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION
Middlesex TW8 9EP UNITED KINGDOM	RECEIVED		(PCT Rule 44.1)
	17 JUL 2000		of mailing
	- MEW HOSTON	+ 1	13/07/2000
Applicant's or agent's file reference FB/BC45226		FOR	FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/EP 00/02478			national filing date month/year) 20/03/2000
Applicant			
SMITHKLINE BEECHAM BIO	LOGICALS S.A.		
1. X The applicant is hereby notifi			
	ed that the international Search	Report	t has been established and is transmitted herewith.
The applicant is entitled, if he	statement under Article 19:		International Application (see Rule 46):
When? The time limit for fili International Search	ng such amendments is normal h Report; however, for more det	ly 2 mor ails, see	onths from the date of transmittal of the ethe notes on the accompanying sheet.
34 12	emational Bureau of WIPO , chemin des Colombettes 11 Geneva 20, Switzerland scimile No.: (41-22) 740.14.35		
	ons, see the notes on the accom	npanying	ng sheet.
2. The applicant is hereby notified Article 17(2)(a) to that effect is	ed that no International Search s transmitted herewith.	Report v	will be established and that the declaration under
3. With regard to the protest a	against payment of (an) addition	al fee(s)	s) under Rule 40.2, the applicant is notified that:
the protest together with	the decision thereon has been	tranomi	itted to the International Bureau together with the the decision thereon to the designated Offices.
no decision has been m	ade yet on the protest; the appli	cant will	Il be notified as soon as a decision is made.
4. Further action(s): The applicant	is reminded of the following:		
priority claim, must reach the Inter completion of the technical prepar	postpone publication, a notice on mational Bureau as provided in ations for international publication	of withdr Rules 9 on.	n will be published by the International Bureau. Irawal of the international application, or of the 90 <i>bis</i> 1 and 90 <i>bis</i> 3, respectively, before the
Within 19 months from the priority of wishes to postpone the entry into	date, a demand for international the national phase until 30 mont	prelimir hs from	inary examination must be filed if the applicant n the priority date (in some Offices even later).
Within 20 months from the priority of	date, the applicant must perform	the pre	escribed acts for entry into the national phase
Name and mailing address of the Intern	ational Searching Authority	Authoriz	zed officer

Mireille Claudepierre

Form PCT/ISA/220 (July 1998)

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, – Fax: (+31-70) 340-3016 These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule, 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new:
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
 "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
 "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
 "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rul s 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of	of Transmittal of International Search Report		
FB/BC45226	ACTION (Form PC1/ISA/220) as well as, where applicable, item 5 below.			
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)		
PCT/EP 00/02478	20/03/2000	26/03/1999		
Applicant		,,		
SMITHKLINE BEECHAM BIOLOGI	CALS S.A.			
This International Search Report has been according to Article 18. A copy is being trai	n prepared by this International Searching Authornsmitted to the International Bureau.	ority and is transmitted to the applicant		
This International Search Report consists o	of a total of sheets. a copy of each prior art document cited in this n	report.		
Basis of the report				
 With regard to the language, the ir language in which it was filed, unle 	nternational search was carried out on the basis ess otherwise indicated under this item.	s of the international application in the		
	as carried out on the basis of a translation of the			
b. With regard to any nucleotide and was carried out on the basis of the	d/or amino acid sequence disclosed in the inte	ernational application, the international search		
	nal application in written form.			
filed together with the intern	national application in computer readable form.			
furnished subsequently to t	this Authority in written form.			
	this Authority in computer readble form.			
	sequently furnished written sequence listing doc	es not go beyond the disclosure in the		
· ·		identical to the written sequence listing has been		
2. X Certain claims were found	d unsearchable (See Box I).			
3. Unity of invention is lacking				
4. With regard to the title,				
the text is approved as subr				
X the text has been established	ed by this Authority to read as follows:			
CASB619 INVOLVED IN COL	ON CANCERS			
5. With regard to the abstract,		•		
the text is approved as subn the text has been establishe within one month from the de	mitted by the applicant. ed, according to Rule 38.2(b), by this Authority a late of mailing of this international search report	as it appears in Box III. The applicant may, t. submit comments to this Authority.		
6. The figure of the drawings to be publish	ned with the abstract is Figure No.			
as suggested by the applica		X None of the figures.		
because the applicant failed				
because this figure better ch	aracterizes the invention.			

International application No. PCT/EP 00/02478

Box	Observations where ertain laims were f und unsear hable (Continuati n of item 1 f first heet)
	mational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	Claims Nos.: 26 Decause they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: The (ant)agonist of claims 26 and 27(a) are not characterised enough as to allow a meaningfull search.
	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Intern	national Searching Authority found multiple inventions in this international application, as follows:
	•
1. A	s all required additional search fees were timely paid by the applicant, this International Search Report covers all earchable claims.
2. A	s all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment any additional fee.
3. As	s only some of the required additional search fees were timely paid by the applicant, this International Search Report overs only those claims for which fees were paid, specifically claims Nos.:
4. No	o required additional search fees were timely paid by the applicant. Consequently, this International Search Report is stricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on	Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 26

The (ant)agonist of claims 26 and 27(a) are not characterised enough as to allow a meaningfull search.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

International Application No T/EP 00/02478

A. CLASSIFICATION OF SUBJECT M IPC 7 C12N15/12 C07K16/30

C07K14/705 A61K38/17 C12N15/11 //A61P35/00

C12Q1/68

G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N C07K A61K C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, STRAND, MEDLINE

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
(WO 99 06548 A (LACROIX BRUNO ;DUCLERT AYMERIC (FR); GENSET (FR); DUMAS MILNE EDWA) 11 February 1999 (1999-02-11) see SEQ ID 51 claims	5-18,22, 27,29,33	
("ak13d08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1405839 3', mRNA sequence" EMBL DATABASE ACCESSION NUMBER AA890726, 6 April 1998 (1998-04-06), XP002141255 the whole document	5,8,13, 32	
	-/		

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.		
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search 4 July 2000	Date of mailing of the international search report 1 3. 07. 00		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Andres, S		

International Application No
Y/EP 00/02478

C.(Continua	ation) DOCUMENTS CONS	/EP 00/02478
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
		Herevant to claim No.
X	"qo16g05.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1908728 3', mRNA sequence" EMBL DATABASE ACCESSION NUMBER AI301140, 4 December 1998 (1998-12-04), XP002141256 the whole document	5,8,13, 32
Α .	WO 95 17209 A (SMITHKLINE BEECHAM BIOLOG; MOMIN PATRICIA MARIE (BE); GARCON NATHA) 29 June 1995 (1995-06-29) the whole document	17-21
X,P	WO 99 54461 A (SCHMITT ARMIN ;SPECHT THOMAS {DE); DAHL EDGAR (DE); HINZMANN BERND) 28 October 1999 (1999-10-28) see SEQ IDs 11 and 173 claims	5-18,22, 27,29, 32,33
P,X	"we72g04.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2346678 3', mRNA sequence" EMBL DATABASE ACCESSION NUMBER AI672868, 19 May 1999 (1999-05-19), XP002141254 the whole document	5,8,13
P,X	OHARA, O. ET AL.: "Homo sapiens mRNA for KIAA1324 protein, partial cds" EMBL DATABASE ACCESSION NUMBER AB037745, 14 March 2000 (2000-03-14), XP002141282 the whole document -& NAGASE, T. ET AL.: "Prediction of the coding sequences of unidentified human genes.XVI. The complete sequences of 150 new cDNA clones from brain which code for large proteins in vitro" DNA RES., vol. 7, February 2000 (2000-02), pages 65-73, XP000923011	5,8,13,
		·

Information on patent family members

International Application No T/EP 00/02478

	atent document d in search repo	rt	Publication date		Patent family member(s)	Publication date
WO	9906548	Α	11-02-1999	AU	8554798 A	22-02-1999
				EP	1000146 A	17-05-2000
WO	9517209	Α	29-06-1995	AT	177322 T	15-03-1999
				AU	1316495 A	10-07-1995
				AU	687494 B	26-02-1998
				AU	1316695 A	10-07-1995
			•	AU	705521 B	27-05-1999
				AU	6803198 A	09-07-1998
				AU	705519 B	27-05-1999
				AU	6803298 A	09-07-1998
				CA	2179779 A	29-06-1995
				CN	1138298 A	18-12-1996
				DE	69417063 D	15-04-1999
				DE	69417063 T	28-10-1999
				WO	9517210 A	29-06-1995
				ΕP	0735898 A	09-10-1996
				EP	0868918 A	07-10-1998
				ES	2129801 T	16-06-1999
				GR	3029750 T	30-06-1999
				JP	9506887 T	08-07-1997
				NZ	277802 A	27-04-1998
				SG	49257 A	18-05-1998
				SI	735898 T	30-06-1999
				ZA	9410176 A	17-11-1995
WO	9954461	Α.	28-10-1999	DE	19817948 A	21-10-1999